Journal of the Lakehead Amateur Radio Club

HI-Q

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The Prez Sez

This is going to be a very short Prez Sez as I have just returned from the RAC Board of Directors meeting in Ottawa and Cornwall.

This month we are having a very interesting speaker, who has nothing to do with Amateur Radio. He is Bill Hoffman, who advocates fighting bug pests with other predator bugs. I first heard him on the CBC and I think you will find his talk very interesting, and very timely as spring is here (?) and many cities are banning the use of pesticides for cosmetic reasons.

At the Board of Directors meeting we met with IC officials and discussed the possibility of more spectrum. It will be a while before we see it but the wheels are in motion.

At the Board of Directors we discussed many things including: membership, RAC finances, the Norman case and even managed to give away $1000 scholarship award to a NW Ontario Amateur . I will fill you in at the meeting.

Hope to see you there this Thursday at 7:30 in Rm. 195 a the College McIntyre Building.

Bill VE3XT

CANWARN TRAINING

Tuesday, May 13th - 7:30 PM - Thunder Bay - Room 191, McIntyre Building at Confederation College

Geoff Coulson
Warning Preparedness Meteorologist
Environment Canada

Glenn Wakefield VA7MLW CIRCUMNAVIGATING THE WORLD ON THE KIMCHOW

Glenn speaks about the role of amateur radio during his single handed voyage.

How do you keep from being lonely? Do you talk to your self?
I do get lonely occasionally but I'm able to send and receive a limited amount of email every day to and from people like you, friends and family, so that helps. I also talk on my Ham radio to other amateur ham radio operators in the countries that I sail by like South Africa, Australia and New Zealand. So, with all those people to talk to and keep in touch with, I am very rarely lonely. Oh yes .... and of course I have myself to talk to which is usually pretty funny. I've found that I'm not bad company and the funny thing is I find myself listening to myself.
Do you carry amateur radio HF transmitters and if so what bands and frequencies do you work?
I have an ICOM m-802 SSB-ham radio with an automatic tuner and about 100 sq. ft. of copper mesh laid on the inside of the hull below the water line going from bow to the stern attached to an insulated back stay. I talk every day to other hams, some more than 5000 miles away, mostly on 20 and 40 meters. It has been an extraordinary experience talking to other amateur radio operators. For a single hander like myself I have met literally hundreds of very interesting and caring people on the ham radio, and I thank them for their continued interest and support of my voyage.

For more information on Glenn's voyage go to

http://www.kimchowaroundtheworld.com/public/index.html

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ABOUT US

The :Lakehead Amateur Radio Club (LARC) is an incorporated not for profit group of amateur radio operators in the Thunder Bay area that meet for self education, community service and fellowship. Our meetings are the second Thursday of the month at room 191 McIntyre Building, Confederation College, 7:30 PM. Our postal address is 1100C Memorial Ave. Suite 184,Thunder Bay, Ontario P7B 4A3. This newsletter is published monthly except for July and August by Ed Baumann VE3SNW and questions and submissions may be emailed to ve3snw@shaw.ca

Lakehead Amateur Radio Club
Treasurer's Report

Balance on Hand - April 7/08		$6,161.43
Income		
Donation	$20.00	
Anderson Connectors	$198.00	
Caps	$40.00	
Memberships	$70.00	
50/50 Draws (Mar & Apr)	$13.00	
Bank Interest	$0.05	
Total Income	**$341.05**	
Expenses		
Thunder Bay Telephone		$47.61
Meeting Expenses	$75.00	
Bank Service Charges	$0.50	
Total Expenses	**$123.11**	
Balance on Hand - May 1/08		$6,379.37

Joe Coghlan - VE3 TBX
Treasurer

LARC OPEN ACCESS REPEATERS

VE3YQT(Mount Baldy)147.060 (-600) Phone Patch

VE3TBR (St. Joseph's) 145.490 (-600) (100.0 Hz)
442.075 (+5 MHz)
144.390 APRS

VE3BGA (Hillcrest H.S.) 145.450 (-600) (IRLP Node VA3LU 123.0 Hz)
442.825 (+5 MHz) (100.0 Hz)

VE3UPP Upsala 145.470 (-600)

PropNET: If the band is open and nobody is transmitting, can anybody hear it?

Welcome to the next level of Amateur wireless innovation. PropNET is an ad-hoc wireless digital network established by experimenters who are excited to explore new frontiers in the invisible world around us.

Participants known as Probes will periodically transmit on an Anchor frequency (see list to the left). Any station that receives that transmission forwards the 'catch' to an Internet server that plots the event on a map hosted by findu (see Map Menu section to the left).

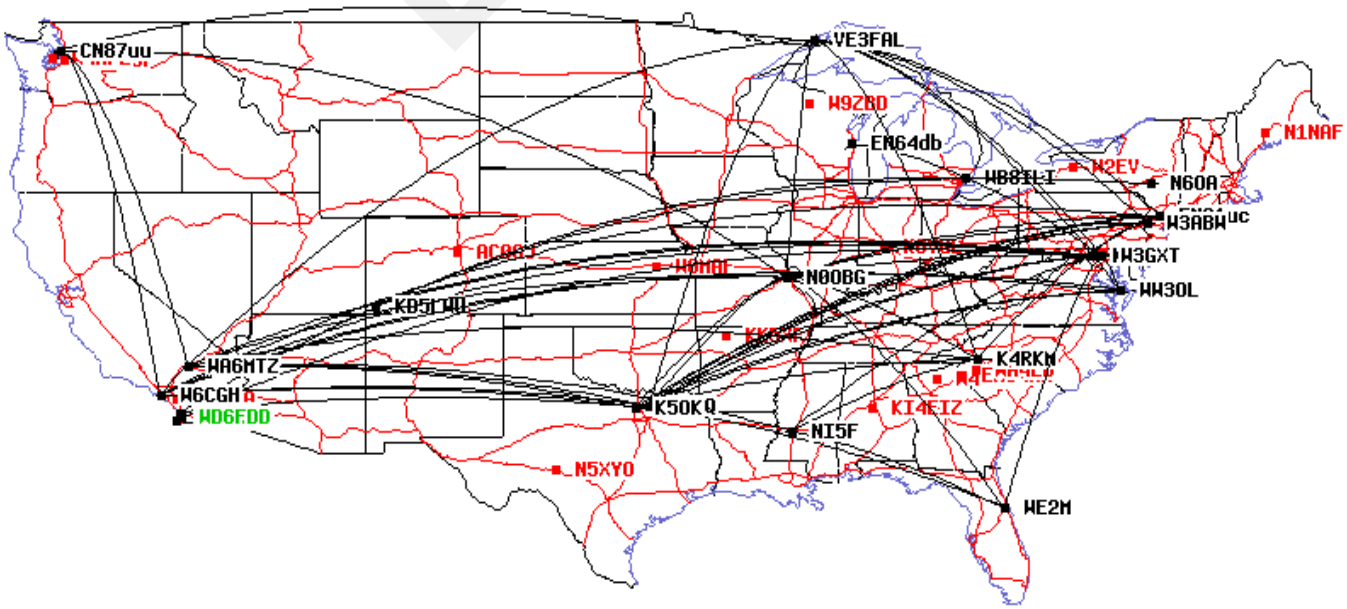
While an Amateur Radio license is required in order to be a transmitting participant (probes), unlicensed individuals are encouraged to participate as receive-only stations (lurkers), reporting what they capture. Click on the hyperlinks above to view real-time maps of participating stations.

Participation requires the use of a Windows-based computer with an available sound-card, a sound-card cable to connect your transceiver to your computer and the PropNetPSK client for your Windows-based computer. See the hyperlinks in the 'Quick Links' section to the left.

Additionally, you may wish to join the PropNET-Online mailing list that is found on YahooGroups.com. By doing so, you will be kept up to date on the project as a whole.

http://www.propnet.org/

This map was from April 8, 2008 at 20:13 z and shows all the paths on 30 meters. I am running 25 watts into a dipole, as you can see I am heard by many stations, and I am hearing these stations as well.



This chart shows the stations hearing each other and reports signal and things like offset etc…

Tx Call	Tx Grid	Rx Call	Rx Grid	Distance	band	offset	imd	Time Heard (UTC)
K4RKM	EM85vf	N0OBG	EM48ro	515.5	HG	-0005	-26	04/08/2008 20:16:29
VE3FAL	EN58hh	W3GXT	FM19ol	872.2	HG	-0148	D60	04/08/2008 20:16:25
N0OBG	EM48ro	N0RQ	EM13rg	498.0	HG	+0003	D99	04/08/2008 20:16
N0OBG	EM48ro	W3GXT	FM19ol	739.4	HG	-0154	D80	04/08/2008 20:16
N0OBG	EM48ro	W3ABW	FN20ot	849.5	HG	-0007	D80	04/08/2008 20:16
N0OBG	EM48ro	WA6MTZ	DM14pw	1464.6	HG	-0011	D50	04/08/2008 20:15:59
N0OBG	EM48ro	K4RKM	EM85vf	515.5	HG	+0004	-25	04/08/2008 20:15:58
K5OK	EM13kf	WA6MTZ	DM14pw	1124.6	HG	-0072	D80	04/08/2008 20:15:21
K5OK	EM13kf	N0OBG	EM48ro	522.5	HG	-0062	-25	04/08/2008 20:15:21
K5OK	EM13kf	W3ABW	FN20ot	1333.4	HG	-0068	D60	04/08/2008 20:15:20
W3GXT	FM19ol	EN64db	EN64db	644.6	HG	+0197	D99	04/08/2008 20:14:41
W3GXT	FM19ol	VE3FAL	EN58hh	872.2	HG	+0148	D70	04/08/2008 20:14:41
W3GXT	FM19ol	WE2M	EL99lc	756.1	HG	+0029	-24	04/08/2008 20:14:40
W3GXT	FM19ol	WE2M	EL99lc	756.1	HG	+0029	-20	04/08/2008 20:14:40

What is encoded in the PHG value?

Keyboard PSK31 operators will often exchange information about their stations. Exchanges are often encoded in repetitive “brag files” that include their location, power output, antenna type, etc. PropNET operation encodes much of this same information in the payload, some of it is in the PHG.APRS users will recognize the PHG code concept. In PropNET, however, the code has been expanded to include the number of ID transmissions per hour. PropNET PHG code is actually a PHGDRA/ code (appearing, in order: Power,Height,Gain,Directivity,Rate,Altitude). The encoding of this information allows PropNET network participants to exchange station-information quickly and efficiently. The encoding table is shown below:

Code>	***0***	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***Note***
Power	0	1	4	9	16	25	36	49	64	81	***1***
Height	10	20	40	80	160	320	640	1280	2560	5120	***2***
Gain	0	1	2	3	4	5	6	7	8	9	***3***
Az	Omni	NE	E	SE	S	SW	W	NW	N		***4***
Rate	0	1	2	3	4	5	6	7	8	9	***5***
ASL	10	20	40	80	160	320	640	1280	2560	5120	***6***

In a typical PSK31 contact, an operator may pack their brag file with information that looks like this: "I am running 25 watts to a 4 element beam at 40 feet here in the high desert of Arizona" A PropNET

participant's station can convey the same information by exchanging "PHG526649" along with a 6-character Maidenhead Grid locator.

Notes:

1: Square root of the TX power.

2: Log2 (H/10), where H is the antenna height above the local average terrain.

3: Antenna gain dBi. If more than 9dBi, use A=10, B=11, C=12 etc.

4: Azimuth of main antenna lobe.

5: Transmissions per hour. If more than 9 per hour, use A=10, B=11, C=12 etc.

6: Log2(h/10), where h is the height of the antenna above sea level.

To "manually" decode the PropNET PHG code, enter it in the webform here:
http://www.pearhead.org/PropNET_PHGRA_decoder

Well there is a small primer to PropNet and propagation studies, a techie level up from 10 meter cw beacons for sure.

Thanks to Jeff Steinkamp N7YG for letting me use some of his material for this article and thanks to the PropNet website.

Fred VE3FAL